## **DOCKET NO. NOKI14-00006**

**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Olli Piirainen

International Application No.

PCT/EP99/01618

International Filing Date

10 March 1999

Title :

ESTIMATION OF DOPPLER SHIFT

COMPENSATION IN A MOBILE

**COMMUNICATION SYSTEM** 

Box PCT Commissioner for Patents Washington, D. C. 20231

Sir:

## PRELIMINARY AMENDMENT

Please amend the above-identified patent application as follows:

## IN THE CLAIMS:

Please cancel claims 1-11 and substitute therefor, claims 12-22 as follows:

12. A system for generating a Doppler correction factor for compensating for Doppler shift in a signal transmitted between a mobile station and a base station in a mobile communication system, the system comprising:

a channel impulse response determination circuit for determining a channel impulse response for the channel on which the signal is received;

reference circuitry for generating a reference vector from a set of known symbols and the channel impulse response;

